## Find and add your own data to COAST

The COAST toolset includes several handy functions to allow users to import their own georeferenced images or vector files, Google Earth KML or KMZ files, or to link to online datasets via Web Map Services. Many datasets have been compiled into data add-ons that are available for download from the COAST Web site. (www.COASTAL.ssc.nasa.gov)
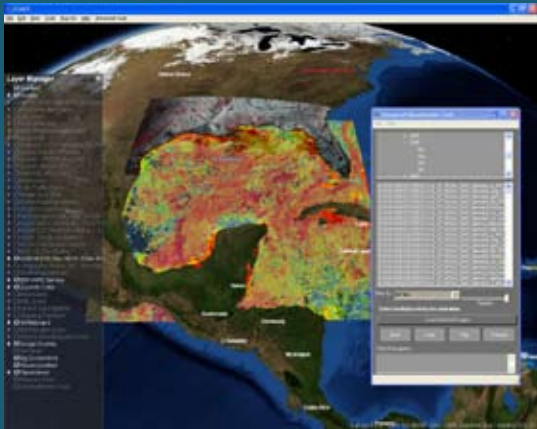
View Animated data changing over time

COAST's special Temporal Visualization Tool has been developed to allow a user to load a series of images that have been taken over a range of time. This special capability gives unique insight into sometimes minute changes that may occur over time in the coastal areas as the environment is changed by storms, events, and seasons. This animated data can also be overlaid with other data layers available within COAST to provide immediate correlation and visual analysis possibilities for the user.

Exploration and Testing:

COAST as project data integrator for Gulf of Mexico Coastal data

COAST capabilities are being tested/demonstrated with ongoing Hypoxia and Regional Sediment modeling studies data that has been identified for investigation and integration into COAST data layers. Modifications or additions to the COAST capability toolset for use with these projects will be identified, tested through user groups, and integrated if proven value added to the community. The SSC development team will also be investigating the possibility of including COAST project files as links from the Coastal Website project description pages and hub sites. If proven feasible, this would take on a similar functionality to the KML Google Earth link schema that would launch a COAST viewer (after download) from the Web site for immediate online project data discovery by individuals. It is hoped that this functionality would provide a significant value-added capability for the current subject data user community.

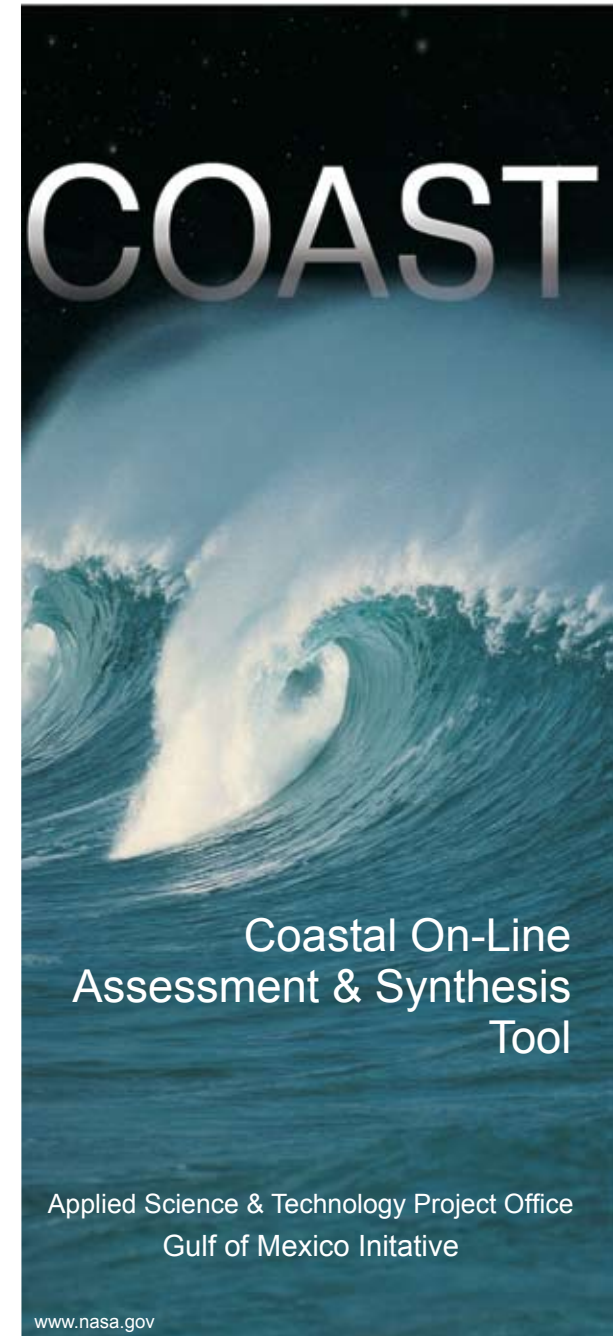COAST version 1.0.0 is ready for download from our website at:

www.coastal.ssc.nasa.gov

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National Aeronautics and Space Administration

COAST

Coastal On-Line Assessment & Synthesis Tool

Applied Science & Technology Project Office
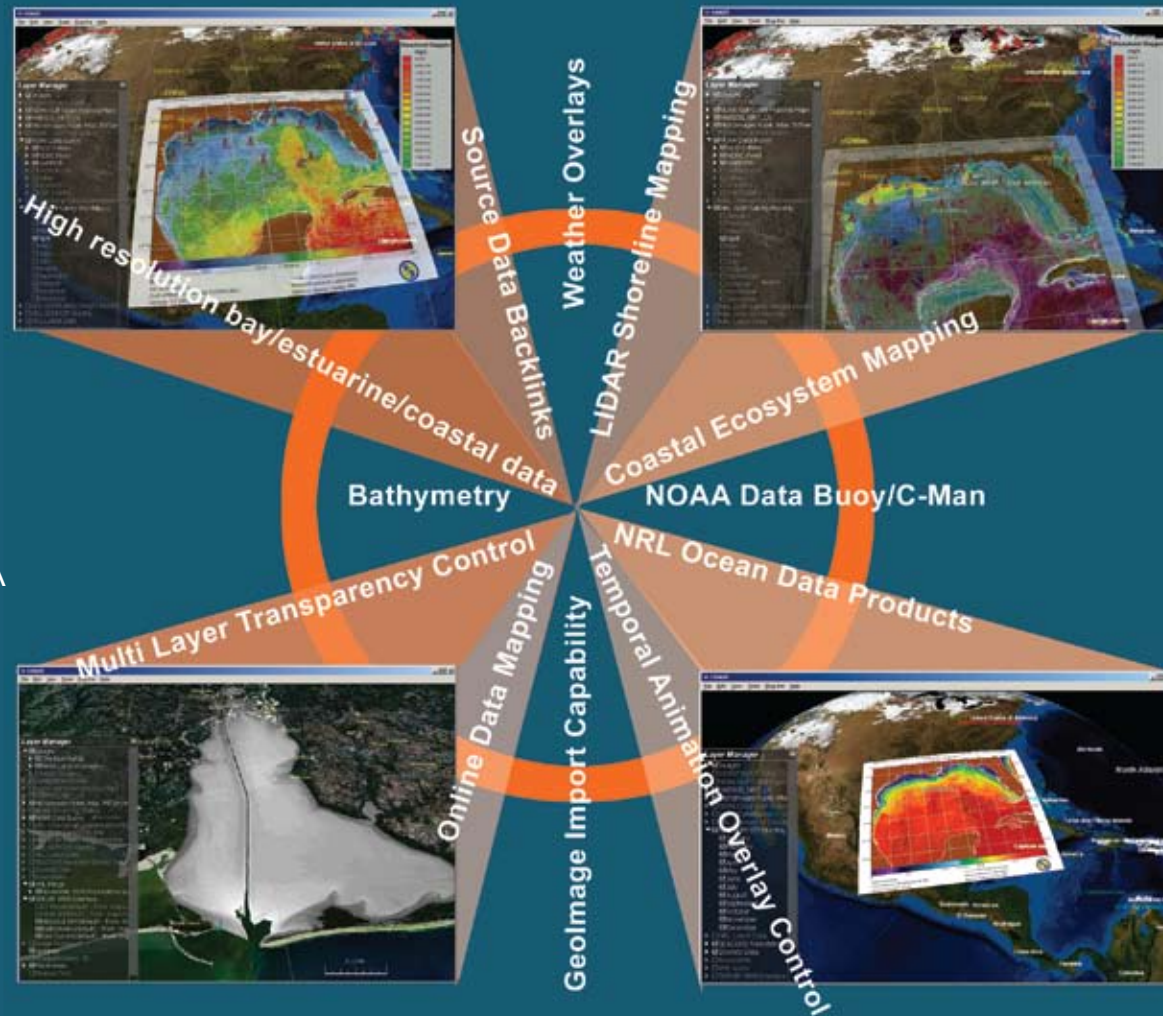
Gulf of Mexico Initative

www.nasa.gov

COAST:

NASA OpenSource Software Heritage Leveraged for Lower Cost Scientific Insight

The Coastal Online Assessment and Synthesis Tool (COAST) geobrowser is being developed at NASA SSC to integrate previously disparate NASA and other agency coastal datasets into a common desktop tool. COAST will provide insightful new data visualization and analysis capabilities for the coastal researcher and for the coastal data user community.

COAST is built upon the immensely successful NASA opensource 3D geobrowser, WorldWind, developed at NASA Ames Research Center. . The NASA opensource heritage of COAST from WorldWind lends great userbase development leverage and usability due to the large international opensource developer community that has grown over the past several years. COAST is being developed to make maximum use of open source data access, viewing, and data manipulation software tools for a low-cost, easily installable package

Coastal On-Line
Assessment & Synthesis Tool

High resolution bay/estuarine/coastal data

Source Data Backlinks

Weather Overlays

LiDAR Shoreline Mapping

Coastal Ecosystem Mapping

Bathymetry

NOAA Data Buoy/C-Man

Multi Layer Transparency Control

Online Data Mapping

Temporal Animation

NRL Ocean Data Products

GeoImage Import Capability

Overlay Control

for potential users upon completion of the initial COAST release. Because COAST is a developmental tool, subsequent changes/ enhancements to its core capabilities will be reflected in regular incremental updates that coincide with major lifecycle modification points.

What Can I do with COAST?

Access Data from all over at your location.

COAST allows a user to access a multitude of pre-mapped data layers that range from NASA satellite images to USGS or NOAA high-resolution photographs. It's a simple as clicking on a layer in the Layer Manager on the screen. The layers are stacked on top of each other; with the transparency control slider, a user can fade away any selected layer to reveal the layer below. This makes it easy to see changes in two image layers (e.g., taken at different times) and has proven to be very helpful in quick visual analysis of coastal change phenomena.